Introduction

The aim of the project is to create dimension and fact table for the given CSV file which has all the detailed data of Sachin tendulkar's cricket matches. And represent the information using visualization.

Objectives

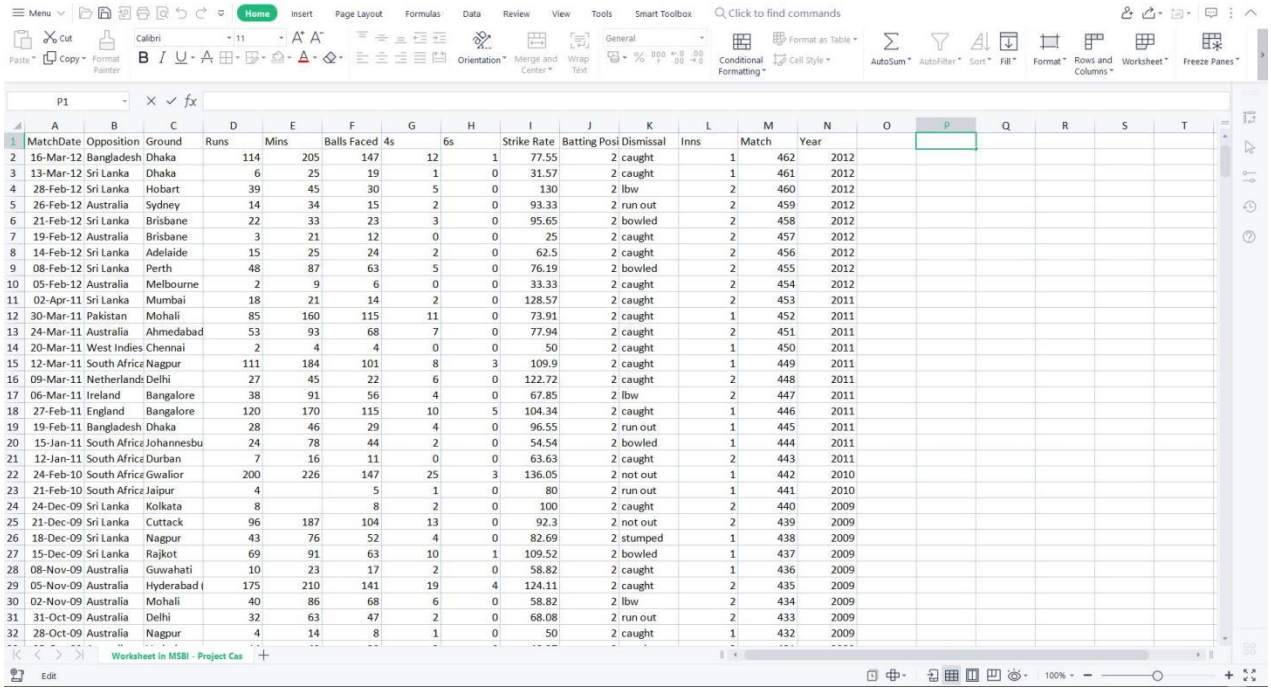
- Load into staging.
- Design Dimension and Fact
- Load Dimension and Fact in proper order
- Use PowerBI as reporting tool
- Visualize the data

An overview of the tools used in the project

- SSIS
- SSMS
- Visual studio
- Power bi

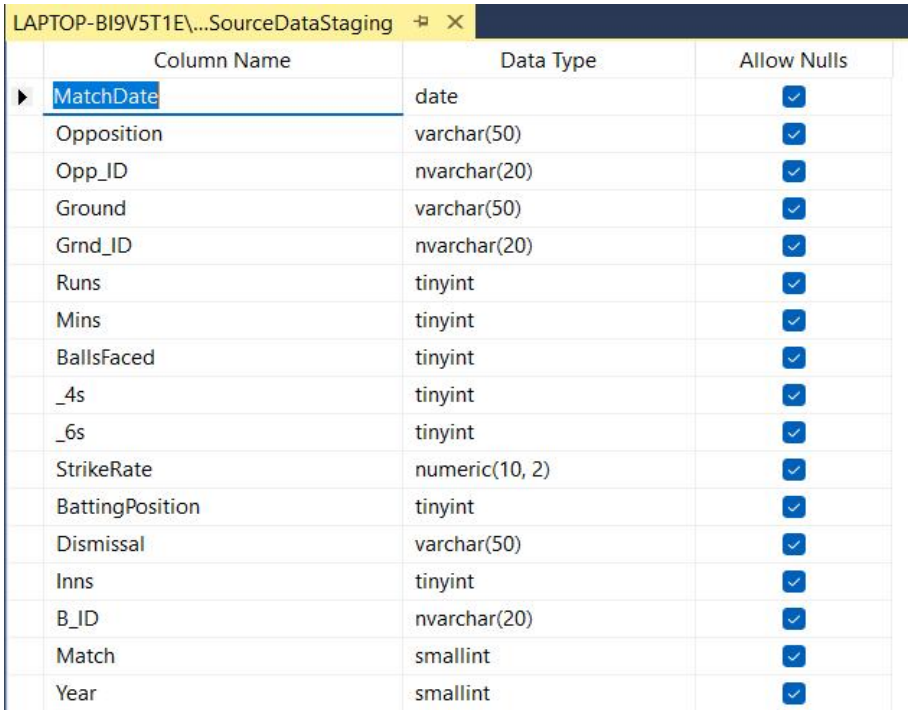
STEPS INVOLVED IN PROJECT

The CSV file provided is given below



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	MatchDate	Opposition	Ground	Runs	Mins	Balls Faced	4s	6s	Strike Rate	Batting Posi	Dismissal	Inns	Match	Year
2	16-Mar-12	Bangladesh	Dhaka	114	205	147	12	1	77.55	2	caught	1	462	2012
3	13-Mar-12	Sri Lanka	Dhaka	6	25	19	1	0	31.57	2	caught	1	461	2012
4	28-Feb-12	Sri Lanka	Hobart	39	45	30	5	0	130	2	lbw	2	460	2012
5	26-Feb-12	Australia	Sydney	14	34	15	2	0	93.33	2	run out	2	459	2012
6	21-Feb-12	Sri Lanka	Brisbane	22	33	23	3	0	95.65	2	bowled	2	458	2012
7	19-Feb-12	Australia	Brisbane	3	21	12	0	0	25	2	caught	2	457	2012
8	14-Feb-12	Sri Lanka	Adelaide	15	25	24	2	0	62.5	2	caught	2	456	2012
9	08-Feb-12	Sri Lanka	Perth	48	87	63	5	0	76.19	2	bowled	2	455	2012
10	05-Feb-12	Australia	Melbourne	2	9	6	0	0	33.33	2	caught	2	454	2012
11	02-Apr-11	Sri Lanka	Mumbai	18	21	14	2	0	128.57	2	caught	2	453	2011
12	30-Mar-11	Pakistan	Mohali	85	160	115	11	0	73.91	2	caught	1	452	2011
13	24-Mar-11	Australia	Ahmedabad	53	93	68	7	0	77.94	2	caught	2	451	2011
14	20-Mar-11	West Indies	Chennai	2	4	4	0	0	50	2	caught	1	450	2011
15	12-Mar-11	South Africa	Nagpur	111	184	101	8	3	109.9	2	caught	1	449	2011
16	09-Mar-11	Netherlands	Delhi	27	45	22	6	0	122.72	2	caught	2	448	2011
17	06-Mar-11	Ireland	Bangalore	38	91	56	4	0	67.85	2	lbw	2	447	2011
18	27-Feb-11	England	Bangalore	120	170	115	10	5	104.34	2	caught	1	446	2011
19	19-Feb-11	Bangladesh	Dhaka	28	46	29	4	0	96.55	2	run out	1	445	2011
20	15-Jan-11	South Africa	Johannesbu	24	78	44	2	0	54.54	2	bowled	1	444	2011
21	12-Jan-11	South Africa	Durban	7	16	11	0	0	63.63	2	caught	2	443	2011
22	24-Feb-10	South Africa	Gwalior	200	226	147	25	3	136.05	2	not out	1	442	2010
23	21-Feb-10	South Africa	Jaipur	4		5	1	0	80	2	run out	1	441	2010
24	24-Dec-09	Sri Lanka	Kolkata	8		8	2	0	100	2	caught	2	440	2009
25	21-Dec-09	Sri Lanka	Cuttack	96	187	104	13	0	92.3	2	not out	2	439	2009
26	18-Dec-09	Sri Lanka	Nagpur	43	76	52	4	0	82.69	2	stumped	1	438	2009
27	15-Dec-09	Sri Lanka	Rajkot	69	91	63	10	1	109.52	2	bowled	1	437	2009
28	08-Nov-09	Australia	Guwahati	10	23	17	2	0	58.82	2	caught	1	436	2009
29	05-Nov-09	Australia	Hyderabad (	175	210	141	19	4	124.11	2	caught	2	435	2009
30	02-Nov-09	Australia	Mohali	40	86	68	6	0	58.82	2	lbw	2	434	2009
31	31-Oct-09	Australia	Delhi	32	63	47	2	0	68.08	2	run out	2	433	2009
32	28-Oct-09	Australia	Nagpur	4	14	8	1	0	50	2	caught	1	432	2009

I have created a Sourcedatastaging table in SSMS as a source.

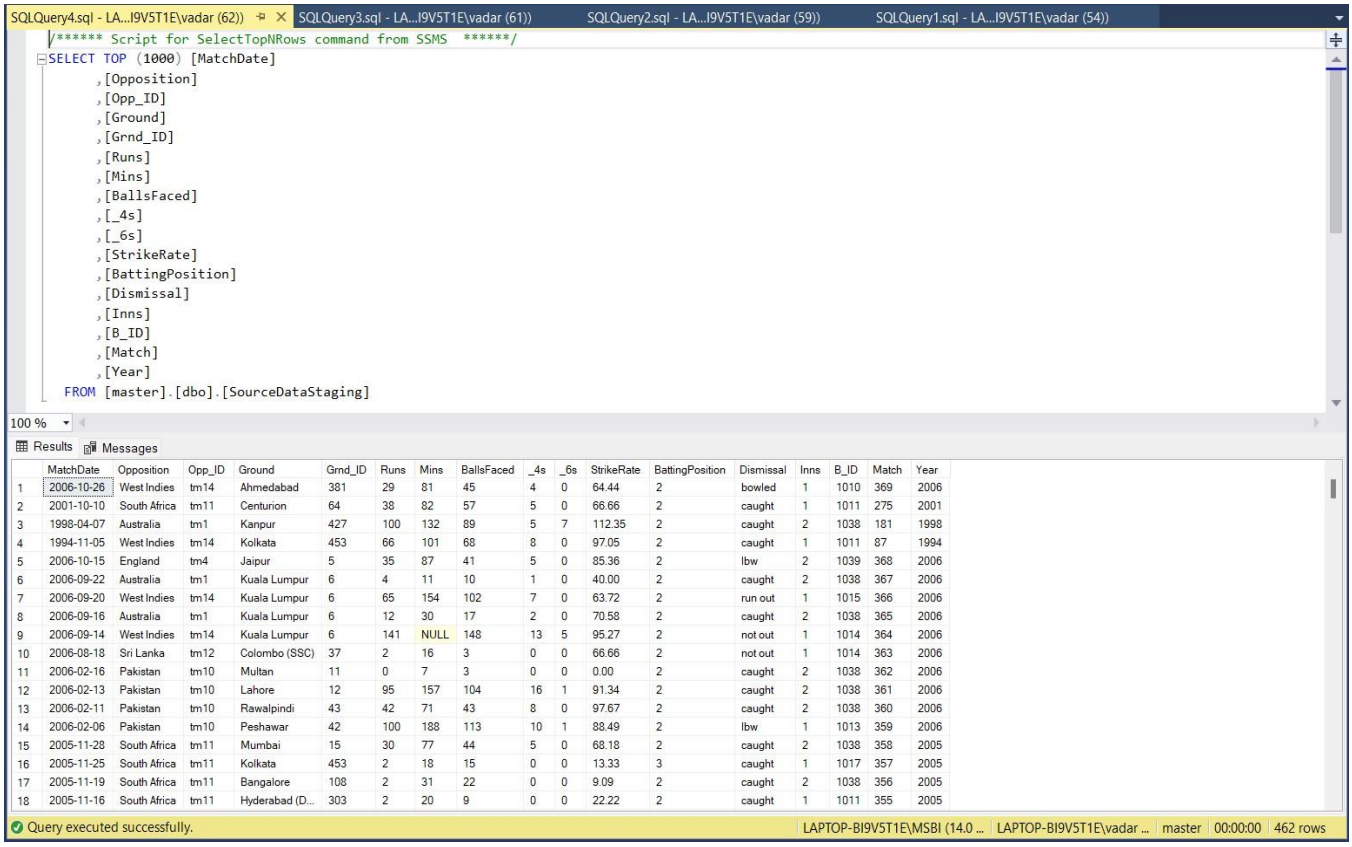


LAPTOP-BI9V5T1E\...SourceDataStaging

Column Name	Data Type	Allow Nulls
MatchDate	date	☑
Opposition	varchar(50)	☑
Opp_ID	nvarchar(20)	☑
Ground	varchar(50)	☑
Grnd_ID	nvarchar(20)	☑
Runs	tinyint	☑
Mins	tinyint	☑
BallsFaced	tinyint	☑
_4s	tinyint	☑
_6s	tinyint	☑
StrikeRate	numeric(10, 2)	☑
BattingPosition	tinyint	☑
Dismissal	varchar(50)	☑
Inns	tinyint	☑
B_ID	nvarchar(20)	☑
Match	smallint	☑
Year	smallint	☑

The sql code for that is as follows

```
Create table
Source_Data_Staging(MatchDate date,
Opposition varchar(50),
Opp_ID nvarchar(20),
Ground varchar(50),
Grnd_ID nvarchar(20),
Runs tinyint,
Mins tinyint,
BallsFaced tinyint,
_4s tinyint,
_6s tinyint,
StrikeRate numeric(10,2),
BattingPosition tinyint,
Dismissal varchar(50),
Inns tinyint,
B_ID nvarchar(20),
Match smallint,
Year smallint
)
```



```
/****** Script for SelectTopNRows command from SSMS  ******/
SELECT TOP (1000) [MatchDate]
      ,[Opposition]
      ,[Opp_ID]
      ,[Ground]
      ,[Grnd_ID]
      ,[Runs]
      ,[Mins]
      ,[BallsFaced]
      ,[_4s]
      ,[_6s]
      ,[StrikeRate]
      ,[BattingPosition]
      ,[Dismissal]
      ,[Inns]
      ,[B_ID]
      ,[Match]
      ,[Year]
  FROM [master].[dbo].[SourceDataStaging]
```

Results Messages

	MatchDate	Opposition	Opp_ID	Ground	Grnd_ID	Runs	Mins	BallsFaced	_4s	_6s	StrikeRate	BattingPosition	Dismissal	Inns	B_ID	Match	Year
1	2006-10-26	West Indies	tm14	Ahmedabad	381	29	81	45	4	0	64.44	2	bowled	1	1010	369	2006
2	2001-10-10	South Africa	tm11	Centurion	64	38	82	57	5	0	66.66	2	caught	1	1011	275	2001
3	1998-04-07	Australia	tm1	Kanpur	427	100	132	89	5	7	112.35	2	caught	2	1038	181	1998
4	1994-11-05	West Indies	tm14	Kolkata	453	66	101	68	8	0	97.05	2	caught	1	1011	87	1994
5	2006-10-15	England	tm4	Jaipur	5	35	87	41	5	0	85.36	2	lbw	2	1039	368	2006
6	2006-09-22	Australia	tm1	Kuala Lumpur	6	4	11	10	1	0	40.00	2	caught	2	1038	367	2006
7	2006-09-20	West Indies	tm14	Kuala Lumpur	6	65	154	102	7	0	63.72	2	run out	1	1015	366	2006
8	2006-09-16	Australia	tm1	Kuala Lumpur	6	12	30	17	2	0	70.58	2	caught	2	1038	365	2006
9	2006-09-14	West Indies	tm14	Kuala Lumpur	6	141	NULL	148	13	5	95.27	2	not out	1	1014	364	2006
10	2006-08-18	Sri Lanka	tm12	Colombo (SSC)	37	2	16	3	0	0	66.66	2	not out	1	1014	363	2006
11	2006-02-16	Pakistan	tm10	Multan	11	0	7	3	0	0	0.00	2	caught	2	1038	362	2006
12	2006-02-13	Pakistan	tm10	Lahore	12	95	157	104	16	1	91.34	2	caught	2	1038	361	2006
13	2006-02-11	Pakistan	tm10	Rawalpindi	43	42	71	43	8	0	97.67	2	caught	2	1038	360	2006
14	2006-02-06	Pakistan	tm10	Peshawar	42	100	188	113	10	1	88.49	2	lbw	1	1013	359	2006
15	2005-11-28	South Africa	tm11	Mumbai	15	30	77	44	5	0	68.18	2	caught	2	1038	358	2005
16	2005-11-25	South Africa	tm11	Kolkata	453	2	18	15	0	0	13.33	3	caught	1	1017	357	2005
17	2005-11-19	South Africa	tm11	Bangalore	108	2	31	22	0	0	9.09	2	caught	2	1038	356	2005
18	2005-11-16	South Africa	tm11	Hyderabad (D...	303	2	20	9	0	0	22.22	2	caught	1	1011	355	2005

Query executed successfully. LAPTOP-BI9V5T1E\MSBI (14.0 ... LAPTOP-BI9V5T1E\vadar ... master 00:00:00 462 rows

Likewise I have created dimension tables In SSMS here is the SQL code for it

Dimension table for innings

```
create table
Dim_innings(B_ID
varchar(20), BattingPosition
tinyint, Innings tinyint,
Dismissal varchar(50)
);
```

Dimension table for grounds

```
create table
Dim_grounds(Grnd_ID
varchar(20), Groundname
varchar(50)
```

);

Dimension table for teams

create table
Dim_teams(team_ID
varchar(20), teamname
varchar(50)
);

With the help of SS IAS tools in Visual Studio, the data in the CSV file is loaded and has been and has been error handled and then loaded into the database which will be the Staging table for the further process.

This is the staging table

SQLQuery4.sql - LA...I9V5T1E\vadar (62)) | SQLQuery3.sql - LA...I9V5T1E\vadar (61)) | SQLQuery2.sql - LA...I9V5T1E\vadar (59)) | SQLQuery1.sql - L

```
/****** Script for SelectTopNRows command from SSMS  ******/
SELECT TOP (1000) [MatchDate]
      ,[Opposition]
      ,[Opp_ID]
      ,[Ground]
      ,[Grnd_ID]
      ,[Runs]
      ,[Mins]
      ,[BallsFaced]
      ,[_4s]
      ,[_6s]
      ,[StrikeRate]
      ,[BattingPosition]
      ,[Dismissal]
      ,[Inns]
      ,[B_ID]
      ,[Match]
      ,[Year]
  FROM [master].[dbo].[SourceDataStaging]
```

100 %

Results | Messages

	MatchDate	Opposition	Opp_ID	Ground	Grnd_ID	Runs	Mins	BallsFaced	_4s	_6s	StrikeRate	BattingPosition	Dismissal	Inns	B_ID	Match	Year
1	2006-10-26	West Indies	tm14	Ahmedabad	381	29	81	45	4	0	64.44	2	bowled	1	1010	369	2006
2	2001-10-10	South Africa	tm11	Centurion	64	38	82	57	5	0	66.66	2	caught	1	1011	275	2001
3	1998-04-07	Australia	tm1	Kanpur	427	100	132	89	5	7	112.35	2	caught	2	1038	181	1998
4	1994-11-05	West Indies	tm14	Kolkata	453	66	101	68	8	0	97.05	2	caught	1	1011	87	1994
5	2006-10-15	England	tm4	Jaipur	5	35	87	41	5	0	85.36	2	lbw	2	1039	368	2006
6	2006-09-22	Australia	tm1	Kuala Lumpur	6	4	11	10	1	0	40.00	2	caught	2	1038	367	2006
7	2006-09-20	West Indies	tm14	Kuala Lumpur	6	65	154	102	7	0	63.72	2	run out	1	1015	366	2006
8	2006-09-16	Australia	tm1	Kuala Lumpur	6	12	30	17	2	0	70.58	2	caught	2	1038	365	2006
9	2006-09-14	West Indies	tm14	Kuala Lumpur	6	141	NULL	148	13	5	95.27	2	not out	1	1014	364	2006
10	2006-08-18	Sri Lanka	tm12	Colombo (SSC)	37	2	16	3	0	0	66.66	2	not out	1	1014	363	2006
11	2006-02-16	Pakistan	tm10	Multan	11	0	7	3	0	0	0.00	2	caught	2	1038	362	2006
12	2006-02-13	Pakistan	tm10	Lahore	12	95	157	104	16	1	91.34	2	caught	2	1038	361	2006
13	2006-02-11	Pakistan	tm10	Rawalpindi	43	42	71	43	8	0	97.67	2	caught	2	1038	360	2006
14	2006-02-06	Pakistan	tm10	Peshawar	42	100	188	113	10	1	88.49	2	lbw	1	1013	359	2006
15	2005-11-28	South Africa	tm11	Mumbai	15	30	77	44	5	0	68.18	2	caught	2	1038	358	2005
16	2005-11-25	South Africa	tm11	Kolkata	453	2	18	15	0	0	13.33	3	caught	1	1017	357	2005
17	2005-11-19	South Africa	tm11	Bangalore	108	2	31	22	0	0	9.09	2	caught	2	1038	356	2005
18	2005-11-16	South Africa	tm11	Hyderabad (D...	303	2	20	9	0	0	22.22	2	caught	1	1011	355	2005

Query executed successfully. LAPTOP-BI9V5T1E\MSBI (14.0

Here is the Visual Studio data flow for loading data into source data staging table

Here I have also calculated the strike rate as there are some missing data in strike rate

Table after execution

Query result (up to the first 200 rows):

MatchD...	Oppositi...	Opp_ID	Ground	Grnd_ID	Runs	Mins	BallsFaced	_4s	_6s	StrikeRate	BattingP...	Dismissal	Inns	B_ID	Match	Year
26-10-...	West In...	tm14	Ahmed...	1	29	81	45	4	0	64.44	2	bowled	1	1010	369	2006
10-10-...	South ...	tm11	Centurion	2	38	82	57	5	0	66.66	2	caught	1	1011	275	2001
07-04-...	Australia	tm1	Kanpur	3	100	132	89	5	7	112.35	2	caught	2	1038	181	1998
05-11-...	West In...	tm14	Kolkata	4	66	101	68	8	0	97.05	2	caught	1	1011	87	1994
26-10-...	West In...	tm14	Ahmed...	1	29	81	45	4	0	64.44	2	bowled	1	1010	369	2006
07-04-...	Australia	tm1	Kanpur	3	100	132	89	5	7	112.35	2	caught	2	1038	181	1998
05-04-...	Zimbab...	tm15	Vadodara	19	5	44	17	0	0	29.41	2	run out	1	1015	180	1998
01-04-...	Australia	tm1	Kochi	30	8	21	11	1	0	72.72	2	caught	1	1011	179	1998
18-01-...	Pakistan	tm10	Dhaka	31	41	NULL	26	7	1	157.69	2	caught	2	1038	178	1998
16-01-...	Pakistan	tm10	Dhaka	31	1	14	6	0	0	16.66	2	bowled	1	1010	177	1998
14-01-...	Pakistan	tm10	Dhaka	31	95	104	78	6	5	121.79	2	bowled	2	1037	176	1998
11-01-...	Pakistan	tm10	Dhaka	31	67	NULL	44	11	0	152.27	2	stumped	1	1016	175	1998
10-01-...	Banglad...	tm2	Dhaka	31	54	104	76	4	0	71.05	4	caught	2	1047	174	1998
28-12-...	Sri Lanka	tm12	Margao	104	6	23	13	0	0	46.15	3	caught	1	1017	173	1997
25-12-...	Sri Lanka	tm12	Indore	106	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	0	1000	172	1997
22-12-...	Sri Lanka	tm12	Guwahati	144	82	110	86	6	0	95.34	4	not out	2	1049	171	1997
16-12-...	West In...	tm14	Sharjah	114	1	3	2	0	0	50.00	4	run out	2	1050	170	1997
14-12-...	Pakistan	tm10	Sharjah	114	3	4	4	0	0	75.00	5	caught	1	1024	169	1997
11-12-...	England	tm4	Sharjah	114	91	146	87	4	2	104.59	4	stumped	2	1051	168	1997
02-10-...	Pakistan	tm10	Lahore	12	7	19	11	1	0	63.63	1	caught	1	1006	167	1997
30-09-...	Pakistan	tm10	Karachi	44	21	24	18	2	1	116.66	1	caught	2	1033	166	1997
28-09-...	Pakistan	tm10	Hydera...	206	2	17	11	0	0	18.18	1	bowled	1	1005	165	1997
21-09-...	Pakistan	tm10	Toronto	175	51	106	64	4	1	79.68	1	lbw	1	1007	164	1997
20-09-...	Pakistan	tm10	Toronto	175	6	10	7	1	0	85.71	1	caught	2	1033	163	1997
18-09-...	Pakistan	tm10	Toronto	175	0	26	10	0	0	0.00	4	caught	1	1020	162	1997
17-09-...	Pakistan	tm10	Toronto	175	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	0	1000	161	1997
14-09-...	Pakistan	tm10	Toronto	175	25	66	45	3	0	55.55	4	not out	2	1049	160	1997
13-09-...	Pakistan	tm10	Toronto	175	17	82	54	2	0	31.48	1	caught	1	1006	159	1997
24-08-...	Sri Lanka	tm12	Colomb...	10	39	41	32	3	2	121.87	1	caught	2	1033	158	1997
23-08-...	Sri Lanka	tm12	Colomb...	10	27	47	31	4	0	87.09	2	caught	1	1011	157	1997
20-08-...	Sri Lanka	tm12	Colomb...	34	6	4	6	1	0	100.00	1	lbw	1	1007	156	1997
17-08-...	Sri Lanka	tm12	Colomb...	34	27	55	28	3	0	96.42	1	caught	2	1033	155	1997
26-07-...	Sri Lanka	tm12	Colomb...	34	53	109	67	2	0	79.10	4	caught	1	1020	154	1997
24-07-...	Banglad...	tm2	Colomb...	10	28	36	21	5	0	133.33	2	bowled	2	1037	153	1997
20-07-...	Pakistan	tm10	Colomb...	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	0	1000	152	1997
18-07-...	Sri Lanka	tm12	Colomb...	34	21	49	28	3	0	75.00	1	bowled	1	1005	151	1997
21-05-...	Pakistan	tm10	Chennai	58	4	10	7	1	0	57.14	1	caught	2	1033	150	1997
17-05-...	Sri Lanka	tm12	Mumbai	15	2	19	4	0	0	50.00	2	caught	1	1011	149	1997
14-05-...	New Ze...	tm9	Bangalore	17	117	188	137	13	2	85.40	2	bowled	2	1037	148	1997
03-05-...	West In...	tm14	Bridget...	86	1	17	11	0	0	9.09	1	caught	1	1006	147	1997

After this I have loaded data into the teams dimension table using script component i have given the IDs

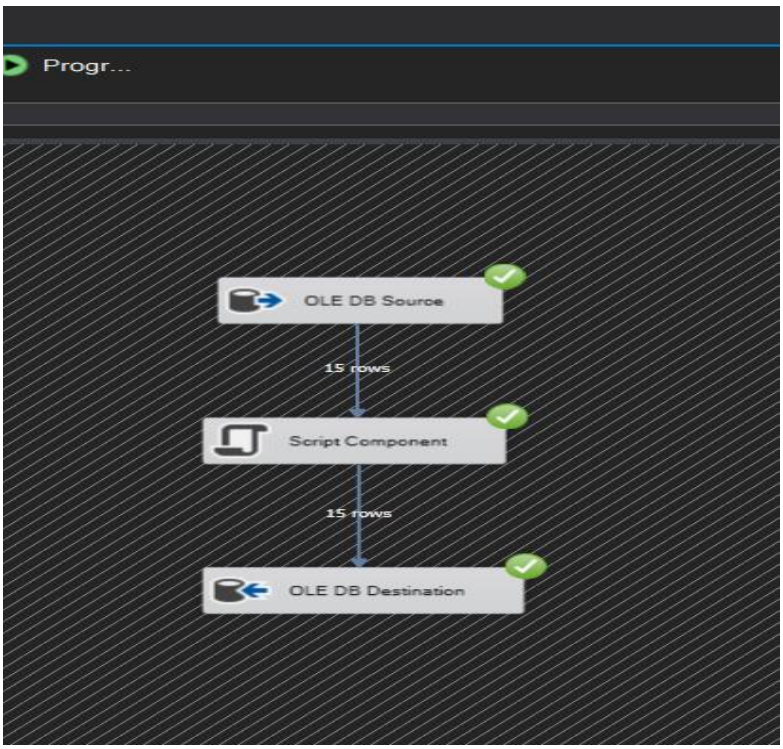


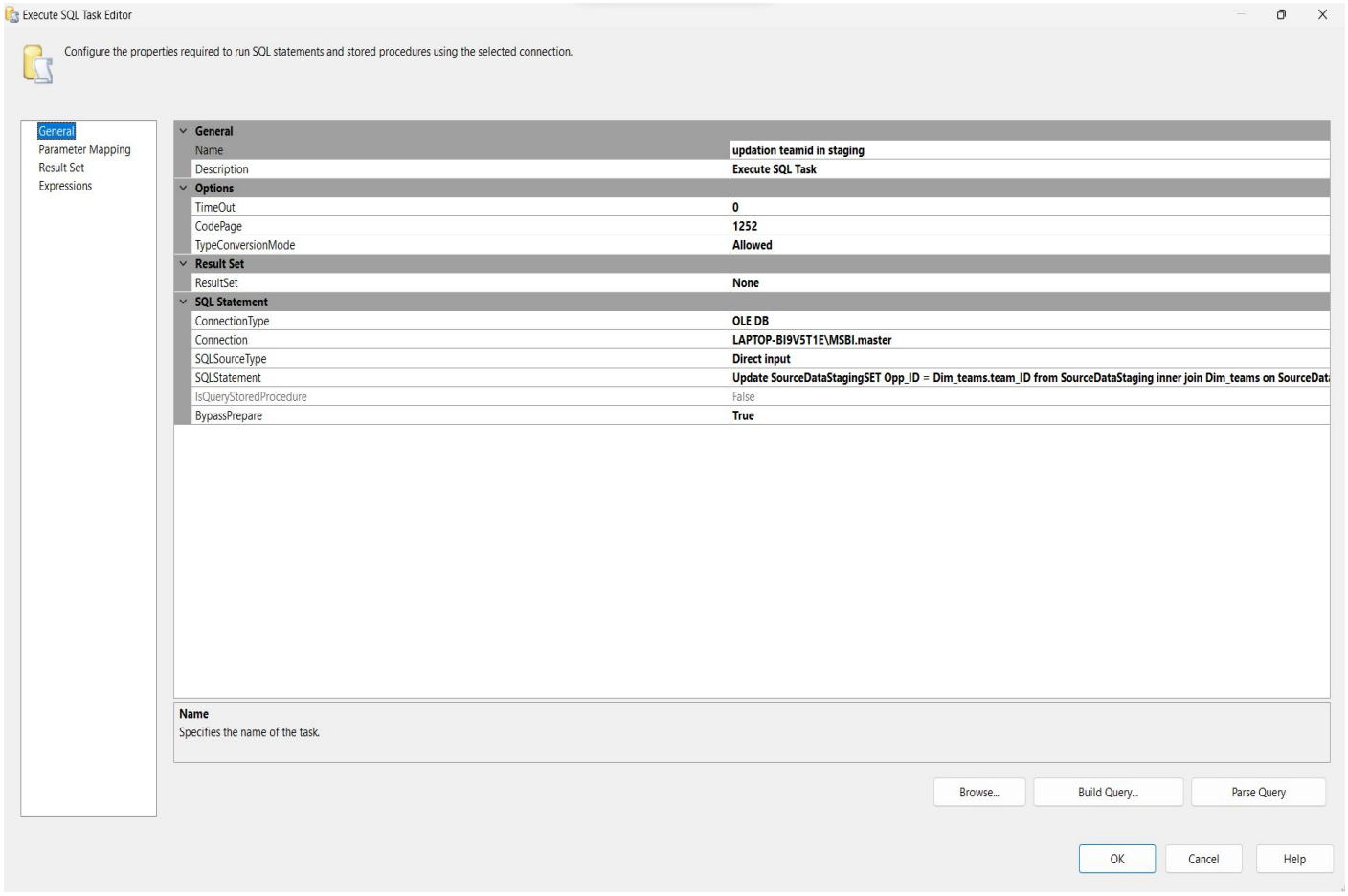
Table after execution

Preview Query Results

Query result (up to the first 200 rows):

team_ID	teamna...
tm1	Australia
tm2	Banglad...
tm3	Bermuda
tm4	England
tm5	Ireland
tm6	Kenya
tm7	Namibia
tm8	Netherl...
tm9	New Ze...
tm10	Pakistan
tm11	South ...
tm12	Sri Lanka
tm13	United ...
tm14	West In...
tm15	Zimbab...

And then updated the teamid in the teams dimension table



After this I have loaded data into the ground dimension table using script component i have given the IDs

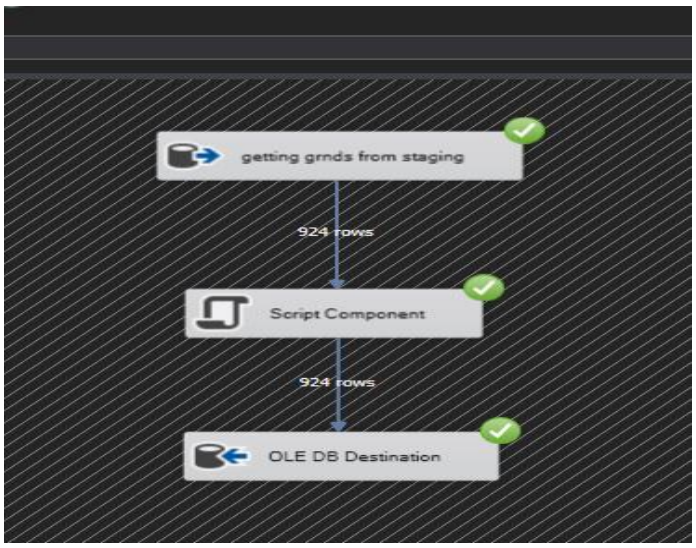


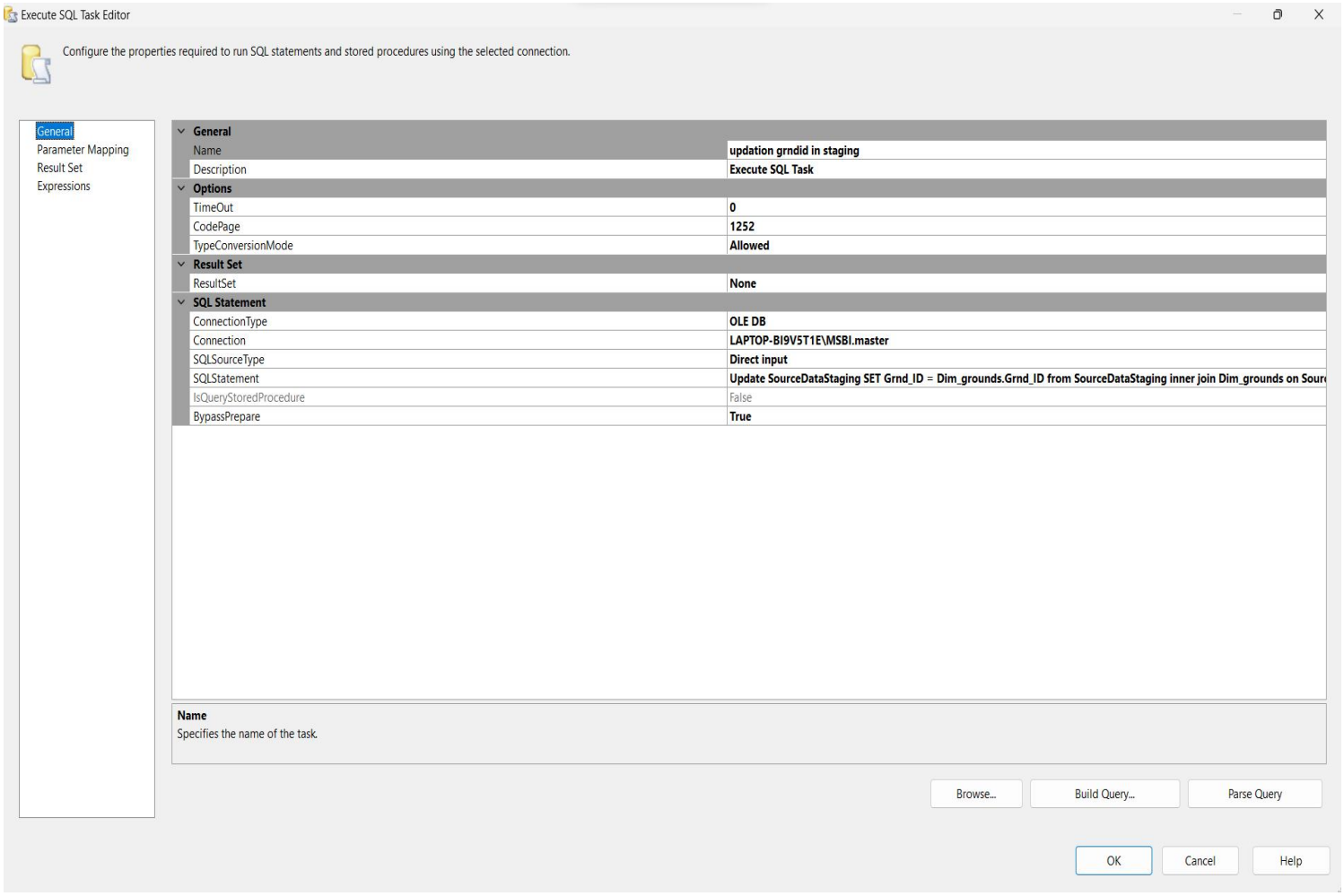
Table after execution

Preview Query Results

Query result (up to the first 200 rows):

Grnd_ID	Ground...
1	Ahmed...
2	Centurion
3	Kanpur
4	Kolkata
5	Jaipur
6	Kuala L...
7	Kuala L...
8	Kuala L...
9	Kuala L...
10	Colomb...
11	Multan
12	Lahore
13	Rawalpi...
14	Peshawar
15	Mumbai
16	Kolkata
17	Bangalore
18	Hydera...
19	Vadodara
20	Rajkot
21	Pune
22	Jaipur
23	Mohali
24	Nagpur
25	Delhi
26	Kanpur
27	Ahmed...
28	Jamshe...
29	Visakha...
30	Kochi
31	Dhaka

And then updated the ground id in the ground dimension table



After this I have loaded data into the innings dimension table using script component i have given the IDs

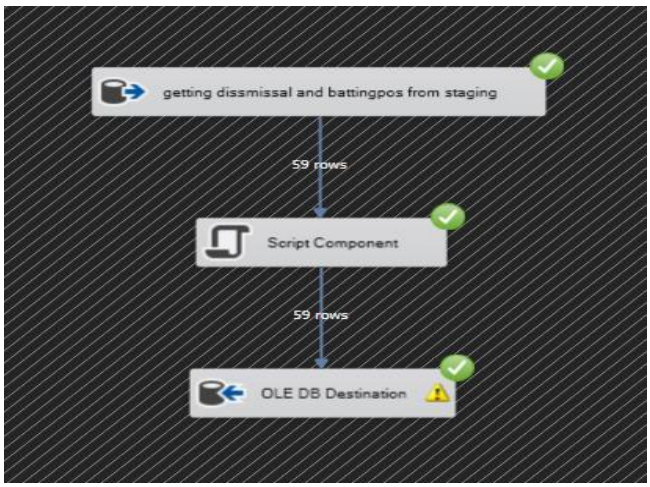


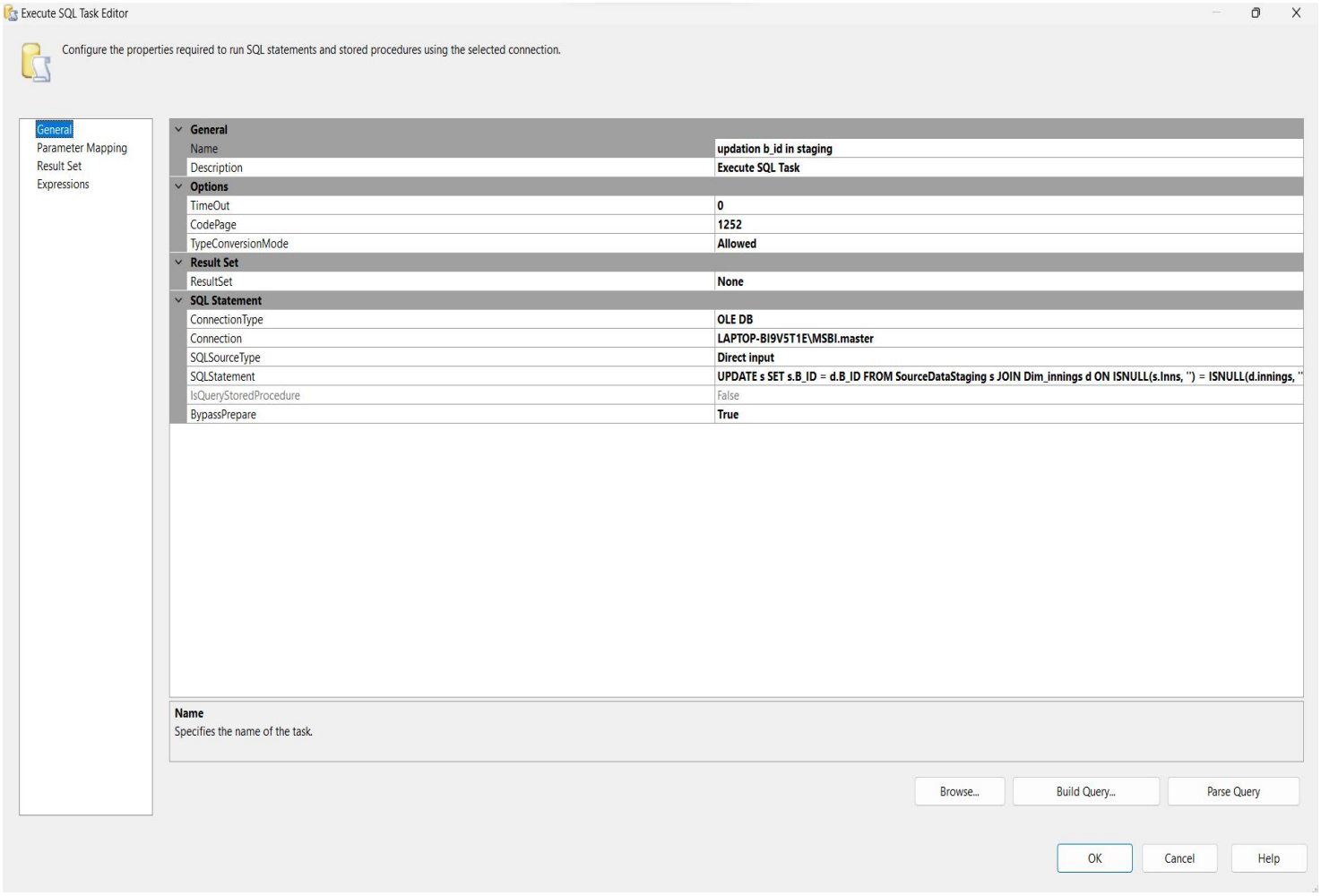
Table after execution

Preview Query Results

Query result (up to the first 200 rows):

B_ID	BattingP...	Innings	Dismissal
1000	NULL	0	NULL
1001	NULL	1	NULL
1002	NULL	1	caught
1003	NULL	1	lbw
1004	NULL	1	retired ...
1005	1	1	bowled
1006	1	1	caught
1007	1	1	lbw
1008	1	1	run out
1009	1	1	stumped
1010	2	1	bowled
1011	2	1	caught
1012	2	1	hit wicket
1013	2	1	lbw
1014	2	1	not out
1015	2	1	run out
1016	2	1	stumped
1017	3	1	caught
1018	3	1	lbw
1019	4	1	bowled
1020	4	1	caught
1021	4	1	not out
1022	4	1	run out
1023	5	1	bowled
1024	5	1	caught
1025	5	1	not out
1026	5	1	run out
1027	6	1	caught
1028	6	1	not out
1029	NULL	2	NULL
1030	NULL	2	caught
1031	NULL	2	lbw
1032	1	2	bowled
1033	1	2	caught
1034	1	2	lbw
1035	1	2	not out
1036	1	2	stumped
1037	2	2	bowled
1038	2	2	caught
1039	2	2	lbw

And then updated the b_id in the innings dimension table

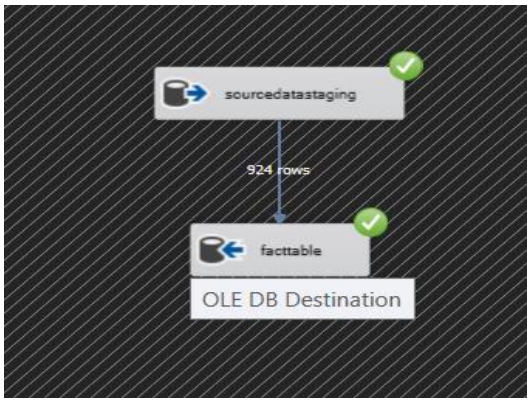


Created a fact table in SSMS

Sql code for fact table

```
Create table
Factsachin(MatchDate
date,
OppID nvarchar(20),
GrndID nvarchar(20),
Runs tinyint,
Mins tinyint,
BallsFaced tinyint,
_4s tinyint,
_6s tinyint,
StrikeRate numeric(10,2),
B_ID nvarchar(20),
Match smallint,
Year smallint
)
```

Then loaded all the ids into fact table



Facttable

SQLQuery5.sql - LA...I9V5T1E\vadar (64)) | SQLQuery4.sql - LA...I9V5T1E\vadar (62)) | SQLQuery3.sql - LA

```
/****** Script for SelectTopNRows command from SSMS  ******/
SELECT TOP (1000) [MatchDate]
      ,[OppID]
      ,[GrndID]
      ,[Runs]
      ,[Mins]
      ,[BallsFaced]
      ,[_4s]
      ,[_6s]
      ,[StrikeRate]
      ,[B_ID]
      ,[Match]
      ,[Year]
  FROM [master].[dbo].[Factsachin]
```

100 %

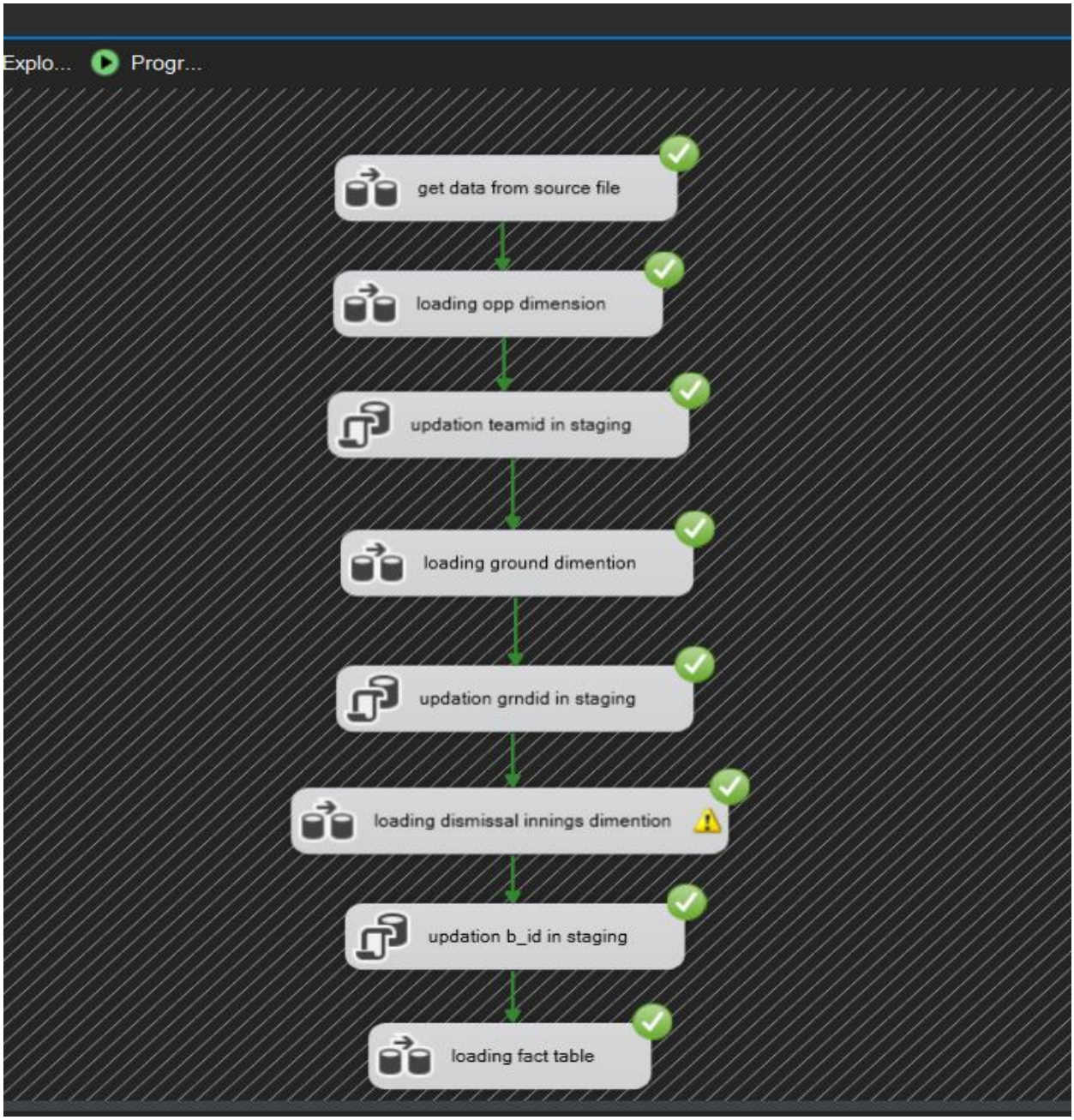
Results | Messages

	MatchDate	OppID	GrndID	Runs	Mins	BallsFaced	_4s	_6s	StrikeRate	B_ID	Match	Year
1	2006-10-26	tm14	381	29	81	45	4	0	64.44	1010	369	2006
2	2001-10-10	tm11	64	38	82	57	5	0	66.66	1011	275	2001
3	1998-04-07	tm1	427	100	132	89	5	7	112.35	1038	181	1998
4	1994-11-05	tm14	453	66	101	68	8	0	97.05	1011	87	1994
5	2006-10-15	tm4	5	35	87	41	5	0	85.36	1039	368	2006
6	2006-09-22	tm1	6	4	11	10	1	0	40.00	1038	367	2006
7	2006-09-20	tm14	6	65	154	102	7	0	63.72	1015	366	2006
8	2006-09-16	tm1	6	12	30	17	2	0	70.58	1038	365	2006
9	2006-09-14	tm14	6	141	NULL	148	13	5	95.27	1014	364	2006
10	2006-08-18	tm12	37	2	16	3	0	0	66.66	1014	363	2006
11	2006-02-16	tm10	11	0	7	3	0	0	0.00	1038	362	2006
12	2006-02-13	tm10	12	95	157	104	16	1	91.34	1038	361	2006
13	2006-02-11	tm10	43	42	71	43	8	0	97.67	1038	360	2006
14	2006-02-06	tm10	42	100	188	113	10	1	88.49	1013	359	2006
15	2005-11-28	tm11	15	30	77	44	5	0	68.18	1038	358	2005
16	2005-11-25	tm11	453	2	18	15	0	0	13.33	1017	357	2005
17	2005-11-19	tm11	108	2	31	22	0	0	9.09	1038	356	2005
18	2005-11-16	tm11	303	2	20	9	0	0	22.22	1011	355	2005
19	2005-11-12	tm12	191	39	76	48	8	0	81.25	1038	354	2005
20	2005-11-09	tm12	452	19	46	30	3	0	63.33	1038	353	2005
21	2005-11-03	tm12	107	11	28	19	1	1	57.89	1037	352	2005
22	2005-10-31	tm12	5	2	2	3	0	0	66.66	1038	351	2005
23	2005-10-28	tm12	23	67	87	69	11	0	97.10	1040	350	2005
24	2005-10-25	tm12	270	93	149	96	9	2	96.87	1011	349	2005

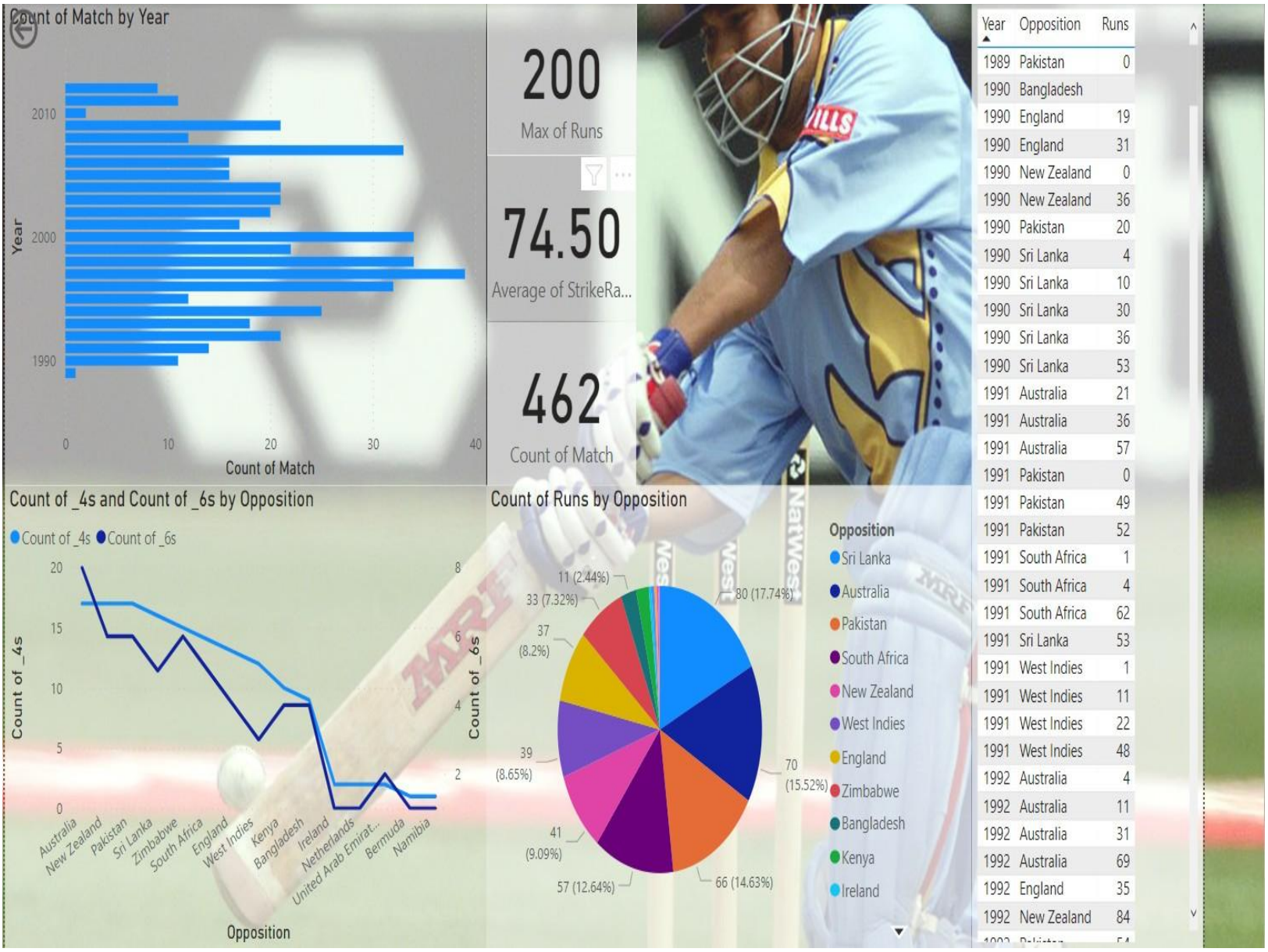
Query executed successfully.

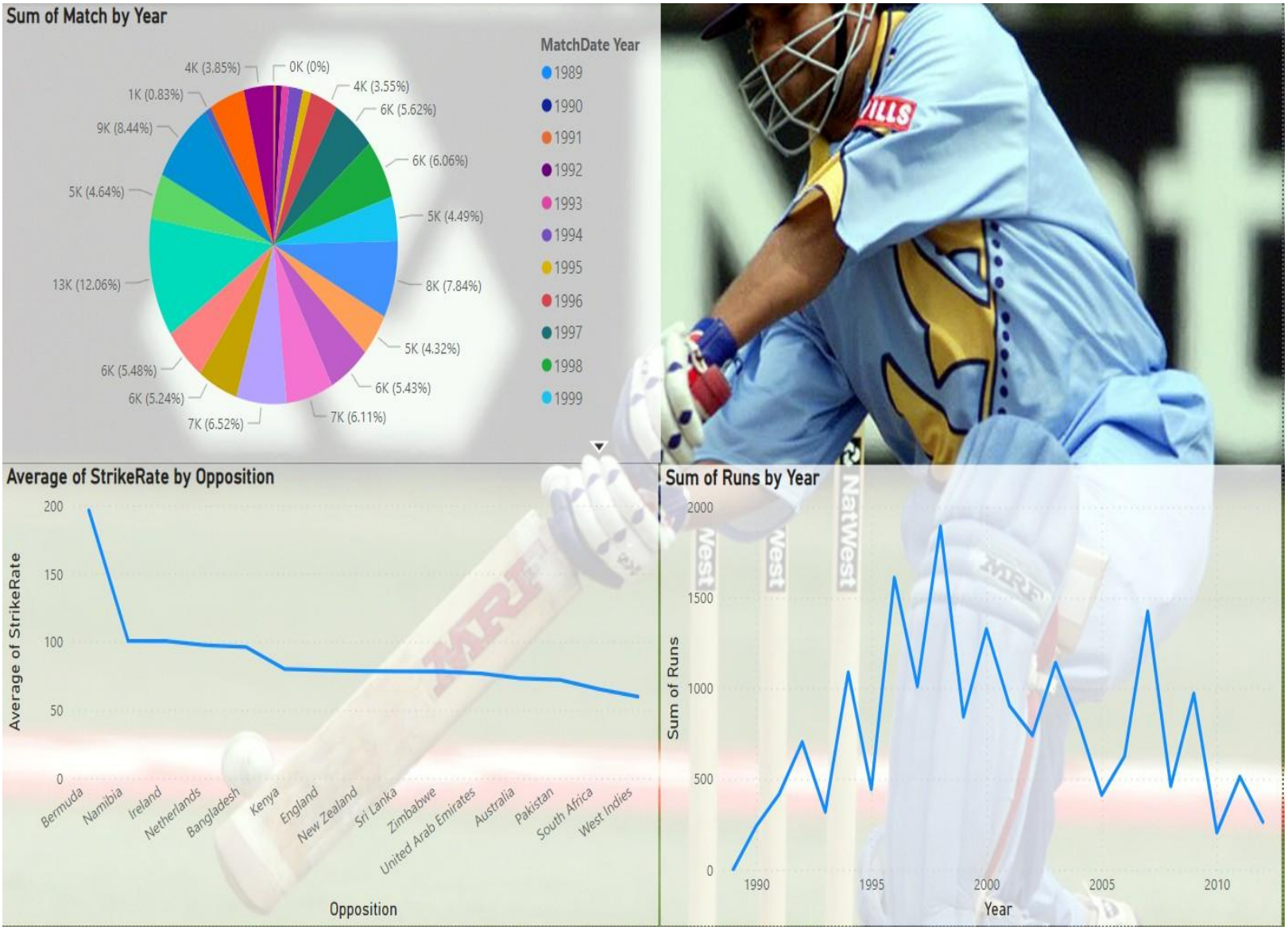
Ln 1 Col 1

After the of successful execution of date of flow and Exhibition of SQL task in Visual Studio the control flow is



Here are the power bi visualizations of the dimension table, fact table and sourcedatastaging table.





Conclusion

SSIS, SSMS, and POWER BI are efficient tools that provide data management, integration, and analysis for organizations of all sizes. Data from diverse sources can be extracted, transformed, and loaded using the robot to data integration tool SSIS. For administering SQL server databases, SSMS, an integrated development environment, offers a number of tools. Data from many sources may be visualized and analyzed by users using the business analytics service POWER BI.